



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,058	07/25/2006	Ulrike Wachendorf-Neumann	CS8786/BCS033016	2145

34469 7590 03/26/2010

BAYER CROPSCIENCE LP

Patent Department

2 T.W. ALEXANDER DRIVE

RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

CHOI, FRANK I

ART UNIT

PAPER NUMBER

1616

NOTIFICATION DATE

DELIVERY MODE

03/26/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

blair.wilson@bayercropsience.com

pamula.ramsey@bayercropsience.com

rebecca.hayes@bayercropsience.com

### Office Action Summary

**Application No.**

10/576,058

**Applicant(s)**

WACHENDORFF-NEUMANN ET AL.

**Examiner**

FRANK I. CHOI

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/17/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

Color photographs and color drawings are not accepted unless a petition filed under 37 CFR 1.84(a)(2) is granted. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification: The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings and black and white photographs have been satisfied. See 37CFR 1.84(b)(2).

It is noted that the petition accompanying the color drawings filed on 4/30/2008 fails to provide a reason explaining why the color drawings are necessary. See 37 CFR 1.84(a)(2).

### ***Claim Rejections - 35 USC § 103***

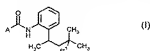
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eicken et al. (US Pat. 5, 438,070) in view of the acknowledged prior art, Eicken et al. (US Pat. 5,480,897), JP 63-48269 and Ding et al. (US Pat. Pub. 2002/0134012).

The claimed invention is directed to a synergistic fungicidal active compound combination of a carboxamide of formula (1)

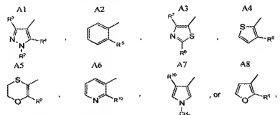
- Claim 19 (new): A synergistic fungicidal active compound combination comprising  
 (1) a carboxamide of the formula (I) (group 1)



in which

R<sup>1</sup> represents hydrogen, halogen, C<sub>1</sub>-C<sub>3</sub>-alkyl, or C<sub>1</sub>-C<sub>3</sub>-haloalkyl having 1 to 7 fluorine, chlorine, and/or bromine atoms,

A represents one of the radicals A1 to A8



R<sup>2</sup> represents C<sub>1</sub>-C<sub>3</sub>-alkyl,

R<sup>3</sup> represents hydrogen, halogen, C<sub>1</sub>-C<sub>3</sub>-alkyl, or C<sub>1</sub>-C<sub>3</sub>-haloalkyl having 1 to 7 fluorine, chlorine, and/or bromine atoms,

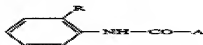
R<sup>4</sup> represents hydrogen, halogen or C<sub>1</sub>-C<sub>3</sub>-alkyl,

R<sup>5</sup> represents halogen, C<sub>1</sub>-C<sub>3</sub>-alkyl, or C<sub>1</sub>-C<sub>3</sub>-haloalkyl having 1 to 7 fluorine, chlorine, and/or bromine atoms,

and at least one active compound selected from groups (2) to (24). application of the same to seed, controlling of unwanted phytopathogenic fungi, protection of transgenic plants or transgenic seeds, and a process for preparing by combining with one or more extenders and/or surfactants.

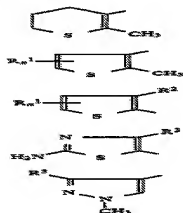
Eicken et al. ('070) discloses anti-fungal carboxanilides of formula (1) (Column 1).

The present invention relates to carboxanilides of the formula I



where the substituents have the following meanings:

R is C<sub>3</sub>-C<sub>12</sub>-alkyl, C<sub>3</sub>-C<sub>12</sub>-alkoxy, C<sub>3</sub>-C<sub>12</sub>-alkenyl, C<sub>3</sub>-C<sub>12</sub>-alkenyloxy, C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>2</sub>-C<sub>6</sub>-alkynyloxy, where these groups can be partially or completely halogenated;  
 C<sub>1</sub>-C<sub>7</sub>-cycloalkyl, C<sub>4</sub>-C<sub>7</sub>-cycloalkenyl, C<sub>3</sub>-C<sub>7</sub>-cycloalkyloxy or C<sub>4</sub>-C<sub>7</sub>-cycloalkenyloxy, where these rings can carry one to three C<sub>1</sub>-C<sub>4</sub>-alkyls; phenyl, which can carry one to five halogens and/or one to three of the following radicals: C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio or C<sub>1</sub>-C<sub>4</sub>-haloalkylthio;  
 A is a cyclic radical from the group consisting of the formulae A1 to A5:



where the substituents have the following meanings:

R<sup>1</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl;  
 R<sup>2</sup> is halogen or C<sub>1</sub>-C<sub>4</sub>-alkyl;  
 R<sup>3</sup> is C<sub>1</sub>-C<sub>4</sub>-alkyl or C<sub>1</sub>-C<sub>4</sub>-haloalkyl;  
 n is 1 or 2, where the radicals R<sup>1</sup> can be different if the value of n is 2.

It is disclosed that R can be straight chain or branched and can include 1,3-dimethylbutyl, 3,3 dimethylbutyl, and 1,2,2-trimethylpropyl (Column 4, lines 54-68). It is disclosed that compounds of formula (I) are effective for protecting plants and that formulations can be prepared with extenders and emulsifiers (Column 18, lines 9-64). It is disclosed that the active ingredients may also be mixed with other microbicides, for example, 2,4,5,6-tetrachloroisophthalodinitrile, and that in many instances a synergistic effect is achieved (Column 20, lines 38-68, Column 21, lines 1-59).

The Applicant acknowledges that the present invention relates to the combination of known carboxamides and known fungicidally active compounds, including strobilurins, triazoles, sulphenamides, valinamides, carboxamides, dithiocarbamates, acylalanines, anilinopyrimidines, benzimidazoles, carbamates, dicarboximides, guanidines, imidazoles, morpholines, pyrroles, phosphonates, phenylethanamides, fungicides (including chlorothalonil), (thio)urea derivatives, triazolopyrimidines, idodochromones and biphenylcaboxamides (Specification, page 1, page 13, lines 28-31, pages 14-37, page 38, lines 1-10).

Eicksen et al. ('897) discloses an anilide derivative of having the general formula which is effective as a fungicide (Column 1, Column 33, lines 16, Columns 31, 32, Column 33, lines 1-15):

The present invention relates to the use of anilide derivatives of the general formula



where A has the following meanings:

pyridin-3-yl substituted in the 2-position by halogen, methyl, trifluoromethyl, methoxy, methylthio, methylsulfinyl or methylsulfonyl,

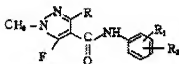
phenyl substituted in 2-position by methyl, trifluoromethyl, chlorine, bromine or iodine,

2-methyl-5,6-dihydropyran-3-yl, 2-methyl-5,6-dihydro-1,4-oxathiin-3-yl, 2-methyl-5,6-dihydro-1,4-oxathiin-3-yl-4-oxide, 2-methyl-5,6-dihydro-1,4-oxathiin-3-yl-4,4-dioxide; 2-methyl-furan-3-yl substituted in the 4- and 5-positions by hydrogen or methyl; thiazol-5-yl substituted in the 2- and 4-positions by hydrogen, methyl, chlorine or trifluoromethyl; thiazol-4-yl substituted in the 2- and 5-positions by hydrogen, methyl, chlorine or trifluoromethyl; 1-methylpyrazol-4-yl substituted in the 3- and 5-positions by methyl, chlorine or trifluoromethyl; or oxazol-5-yl substituted the 2- and 4-positions by hydrogen, methyl or chlorine, and

R has the following meanings: unsubstituted or halogen-substituted  $C_2-C_{12}$ -alkyl, unsubstituted or halogen-substituted  $C_3-C_{12}$ -alkenyl,  $C_3-C_8$ -alkynyl, unsubstituted

It is disclosed that R can be straight chain or branched and can include 1,3-dimethylbutyl, 3,3 dimethylbutyl, and 1,2,2-trimethylpropyl (Column 1, lines 65-68). It is disclosed that compounds of the general formula are effective for protecting plants or seeds of plants and that formulations can be prepared with extenders and emulsifiers (Column 33, lines 16-34). It is disclosed that the active ingredients may also be mixed with other fungicides (Column 35, lines 55-68, Column 36, Column 37, lines 1-45).

JP 63-48269 discloses a fungicide having the following formula:



Where R is methyl or ethyl and R<sub>1</sub> and R<sub>2</sub> are each H, halogen or lower—alkyl or alkoxy (Columns 1, 2).

Ding et al. disclose that fungicidal treatment of seeds reduces the number of separate filed passes that a farmer must make to prepare for, plant and raise a crop (Paragraph 0007). It is disclosed that the treated seeds can be transgenic seeds (Paragraph 0033).

Eicken et al. ('070) discloses anti-fungal carboxanilides of formula (1) where R can be straight chain or branched and can include 1,3-dimethylbutyl, 3,3 dimethylbutyl, and 1,2,2-trimethylpropyl, which are effective for protecting plants, can be prepared with extenders and emulsifies and that the active ingredients may also be mixed with other microbicides, for example, 2,4,5,6-tetrachloroisophthalodinitrile, and that in many instances a synergistic effect is achieved. The difference between Eicken et al. ('070) and the claimed invention is that Eicken et al. ('070) does not expressly disclose the following carboxamides: 5-fluoro-1,3-dimethyl-N-[2-(1,3,3-trimethylbutyl) phenyl]-1H-pyrazole-4-carboxamide, N-[2-(1,3-dimethylbutyl) phenyl]-5-fluoro-1,3-dimethyl-1H-pyrazole-4-carboxamide, N-[2-(1,3-dimethylbutyl) phenyl]-2-(trifluoromethyl) benzamide and N-[2-(1,3-dimethylbutyl) phenyl]-2-iodobenzamide; the treatment of seeds, including transgenic seeds or the treatment of transgenic plants. However, the prior art amply suggests the same as Eicken et al. ('070) discloses that the "A" radical may be substituted by various cyclic rings including a 1,3-dimethyl-N-pyrazole and that R can be straight changed or branched alkyl and can include 1,3-dimethylbutyl, 3,3 dimethylbutyl, and



1,2,2-trimethylpropyl; Eicken et al. ('897) discloses that the "A" radical may be substituted by various cyclic rings including benzene substituted at the 2 position by trifluoromethyl or iodine and 1,3-dimethyl-N-pyrazole-5-chloro and that R can be straight changed or branched alkyl and can include 1,3-dimethylbutyl, 3,3 dimethylbutyl, and 1,2,2-trimethylpropyl and that seeds can be treated with the fungicides; JP 63-48269 discloses 1,3-dimethyl-N-pyrazole-5-fluoro ring on the phenyl 1H-pyrazole-4-carboxamide fungicide and Ding et al. disclose that fungicidal treatment of seeds reduces the number of separate filed passes that a farmer must make to prepare for, plant and raise a crop and that the treated seeds can be transgenic seeds.

As such, in view of the above, one of ordinary skill in the art would expect that since numerous alkyl groups can be substituted at the 2-position of the phenyl, including 1,3-dimethylbutyl, 3,3 dimethylbutyl, and 1,2,2-trimethylpropyl, and that numerous cyclic radicals can be substituted for "A", including 1,3-dimethyl-N-pyrazole-5-chloro while retaining fungicidal activity, that substituting 1,3-dimethylbutyl and 1,3,3-trimethylbutyl for the lower alkyl at the 2-position of the phenyl of the JP 63-48268 compound which has a 1,3-dimethyl-N-pyrazole-5-fluoro ring would also result in a compound which would be effective as a fungicide. Further, in view of the above, one of ordinary skill in the art would expect that a carboxanilide where the "A" radical is a benzene radical substitute at the 2-position by trifluoromethyl or iodine and where R is 1,3-dimethylbutyl would be effective as a fungicide. Also, in view of the above, one of ordinary skill in the art would expect that the fungicides would be effective in treating seeds, including transgenic seeds, and transgenic plants.

Therefore, the claimed invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the references.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-25, 30-35 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12, 14-16 of U.S. Patent No. 7,538,073 in view of Eicken et al. (US Pat. 5, 438,070), the acknowledged prior art, Eicken et al. (US Pat. 5,480,897) and Ding et al. (US Pat. Pub. 2002/0134012).

Claims 1-12, 14-16 of U.S. Patent No. 7,538,073 disclose pyrazolycarboxanilides, including 5-fluoro-1,3-dimethyl-N-[2-(1,3,3-trimethylbutyl) phenyl]-1H-pyrazole-4-carboxamide, N-[2-(1,3-dimethylbutyl) phenyl]-5-fluoro-1,3-dimethyl-1H-pyrazole-4-

carboxamide, and their use in controlling phytopathogenic fungi, combination with extenders and/or surfactants and application to the habitat of the fungi.

Eicken et al. (US Pat. 5, 438,070), the acknowledged prior art, Eicken et al. (US Pat. 5,480,897) and Ding et al. (US Pat. Pub. 2002/0134012) are cited for the same reasons as above and are incorporated herein to avoid repetition.

The difference between the claims of U.S. Patent No. 7,538,073 and the claimed invention is that claims of said US Patent do not expressly disclose combining synergistically with other fungicides and treatment of plants, seeds, including transgenic plants and seeds. However, the prior art amply suggests the same as Eicken et al. (US Pat. 5, 438,070) discloses the synergistic combination of similarly structured carboxanilides with other fungicides in the treatment of plants, the Applicant acknowledges that the claimed other fungicides are known in the art, Eicken et al. (US Pat. 5,480,897) discloses the combination of similarly structured carboxanilides with other fungicides in the treatment of plants and seeds and Ding et al. (US Pat. Pub. 2002/0134012) discloses that transgenic seeds can be treated and that this reduces the total amount of pesticides used during the planting and growing of the crop. As such, one of ordinary skill in the art would expect that the compounds disclosed in the claims of '073 patent could be effectively and synergistically combined with the presently claimed other fungicides and that the same would be effective in treating plants and seeds, including transgenic plants and seeds.

Therefore, the claimed invention, as a whole, would have been an obvious modification of the claims of the cited patent to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the claims of the cited patent and the references.

Claims 1-21, 26-35 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 5-7 of U.S. Patent No. 7,314,958 in view of Eicken et al. (US Pat. 5, 438,070), the acknowledged prior art, Eicken et al. (US Pat. 5,480,897) and Ding et al. (US Pat. Pub. 2002/0134012).

Claims 1-3, 5-7 of U.S. Patent No. 7,314,958 disclose phenylbenzamides, including N-[2-(1,3-dimethylbutyl) phenyl]-2-(trifluoromethyl) benzamide and N-[2-(1,3-dimethylbutyl) phenyl]-2-iodobenzamide and their use in controlling fungi in crops and in combination with extenders and/or surfactants.

Eicken et al. (US Pat. 5, 438,070), the acknowledged prior art, Eicken et al. (US Pat. 5,480,897) and Ding et al. (US Pat. Pub. 2002/0134012) are cited for the same reasons as above and are incorporated herein to avoid repetition.

The difference between the claims of U.S. Patent No. 7,314,958 and the claimed invention is that claims of said US Patent do not expressly disclose combining synergistically with other fungicides and treatment of seeds, including transgenic plants and seeds. However, the prior art amply suggests the same as Eicken et al. (US Pat. 5, 438,070) discloses the synergistic combination of similarly structured carboxanilides with other fungicides in the treatment of plants, the Applicant acknowledges that the claimed other fungicides are known in the art, Eicken et al. (US Pat. 5,480,897) discloses the combination of similarly structured carboxanilides with other fungicides in the treatment of plants and seeds and Ding et al. (US Pat. Pub. 2002/0134012) discloses that transgenic seeds can be treated and that this reduces the total amount of pesticides used during the planting and growing of the crop. As such, one of ordinary skill in the art would expect that the compounds disclosed in the claims of '073 patent could be

effectively and synergistically combined with the presently claimed other fungicides and that the same would be effective in treating seeds, including transgenic seeds, and treating transgenic plants.

Therefore, the claimed invention, as a whole, would have been an obvious modification of the claims of the cited patent to one of ordinary skill in the art at the time the invention was made, because every element of the invention has been collectively taught by the combined teachings of the claims of the cited patent and the references.

### ***Conclusion***

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a compressed schedule and may be reached Monday, Tuesday, Wednesday and Thursday, 6:00 am – 4:30 pm (EST).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Johann R. Richter, can be reached at (571)272-0646. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank Choi  
Patent Examiner  
Technology Center 1600  
March 24, 2010

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616